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## "AUTOMATIC REMOTE CONTROL SYSTEM FOR OPENING AND CLOSING OF VAN OPEN BODY COVER".

This device was developed to offer further technical promptness and handiness and it presents several specifications that adapt easily to solve all the variety conditions of service.

Several other similar options have been created, but none presents the operation easiness of the present device.

The "AUTOMATIC REMOTE CONTROL SYSTEM FOR OPENING AND CLOSING OF VAN OPEN BODY COVER" can be operated by remote control through a pulley and bearing system, a tubular guide, sliding of a cover laid over and guided by a trail where bearings linked to this covering slide as far as the slot key to turn off the motor.

In the complement illustrations attached one can have a clear vision of the "AUTOMATIC REMOTE CONTROL SYSTEM FOR OPENING AND CLOSING OF VAN OPEN BODY COVER".

The several novelty aspects of this invention are shown more elaborately in the features attached. For a better understanding of the invention and its operation advantages and specific objectives references to the drawings and descriptive material are attached to illustrate and describe the invention.

Figure 1 – shows one perspective view of the "AUTOMATIC REMOTE CONTROL SYSTEM FOR OPENING AND CLOSING OF VAN OPEN BODY COVER" with the protection cover of the van open body.

Figure 2 – shows one perspective view of the "AUTOMATIC REMOTE CONTROL SYSTEM FOR OPENING AND CLOSING OF VAN OPEN BODY COVER" without the protection cover featuring the other system components.

- Figure 3 shows one perspective view of the "AUTOMATIC REMOTE CONTROL SYSTEM FOR OPENING AND CLOSING OF VAN OPEN BODY COVER" with the protection cover withdrawn.
  - Figure 4 shows one perspective view of the "AUTOMATIC REMOTE CONTROL SYSTEM FOR OPENING AND CLOSING OF VAN OPEN BODY COVER" with the components without the protection cover withdrawn.

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- Figure 5 shows one perspective view of the "AUTOMATIC REMOTE CONTROL SYSTEM FOR OPENING AND CLOSING OF VAN OPEN BODY COVER" with the screws outstanding, without the protection cover withdrawn.
- Figure 6 shows one perspective view of the "AUTOMATIC REMOTE CONTROL SYSTEM FOR OPENING AND CLOSING OF VAN OPEN BODY COVER" without the protection cover. One can see (1) a pulley, (2) a motor reducer, (3) a bearing to prop axis end, (4) screws fixing the motor on van open body, (5) screws fixing the bearing on van open body (6) bearing screws, (7) screws fixing the rail on van open body.
- Figure 7 shows one perspective view of the "AUTOMATIC REMOTE

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OPEN BODY COVER" with details where we can see: (1) a pulley, (2) a motor reducer, (3) a bearing to prop axis end, (8) a reel system spool, (9) a steel cable, (10) a steel cable tubular guide, (11) a lid for finishing and protection of the transmission system (it prevents raining in) (12) a bearing, (13) a rail, (14) canvas / fabric, (15) an L angle corner plate, (16) an optional protection plastic or wood lid in (7A), (17) an open body view, (18) a bearing, (19) a transversal open body covering, (20) an axle-pin (slot key), (21) L angle hinge fastened with screw and details of the cotter for turning off the motor. in (7 B).

Figure 8 – shows a set of six basic views of the "AUTOMATIC REMOTE CONTROL SYSTEM FOR OPENING AND CLOSING OF VAN OPEN BODY COVER" with an open body in frontal view (8.1) frontal, (8.2) left lateral view (8.3) right lateral view, (8.4) seen posterior view, (8.5) superior view without the canvas, (8.6) inferior view.

Figure 9 -shows a set of five basic views of the "AUTOMATIC REMOTE CONTROL SYSTEM FOR OPENING AND CLOSING OF VAN OPEN BODY COVER" without the open body in (9.1) a frontal view (9.2) right side view, (9.3) left side view, (9.4) upper view, (9.5) lower view.

Figure 10 —shows a detailed view of the "AUTOMATIC REMOTE CONTROL SYSTEM FOR OPENING AND CLOSING OF VAN

OPEN BODY COVER" where we can see a sliced view of the rail end, sampling the route going through the turn off slot key of the motor with (12) bearing, (13) rail, (14) canvas / fabric (open body cover clothes all the bars ) (19) double fixation up to the central, (20) the pin lowers when the bearing passes turning off the motor, (22) sliced view of the angle corner, (23) open body cover transversal bar.

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Figure 11 –shows two perspective views of the "AUTOMATIC REMOTE CONTROL SYSTEM FOR OPENING AND CLOSING OF VAN OPEN BODY COVER" in its rail ends where we can see (11 A) rail without the cotter system (24) in (11 B) rail with the cotter system (25) with (26) cotter for turning off motor, (27) double wiring as far as the central (by remote control or manual operation manual both inside of the van cabin).

Although specific materializations of the invention have been shown and described in detail to illustrate the application of the principles of the invention, it can be materialized in a different way, without keeping away from the principles, the full functions and technical executions of the equipment being able to encompass positive differentials.

It should be taken into account that the reference numbers in the claims are supplied in order to facilitate the understanding of the claims. These reference numbers must not be interpreted as limitations at all.

It is a differentiated model, endowed with novelties that make the product worthy of the title of Model of Usefulness.

## REVINDICATIONS

1) "AUTOMATIC REMOTE CONTROL FOR OPENING AND CLOSING OF VAN OPEN BODY COVER", characterized for (1) a pulley, (2) a motor reducer, (3) a bearing to prop axis end, (4) screws fixing the motor on van open body, (5) screws fixing the bearing on van open body, (6) bearing screws, (7) screws fixing the rail on van open body, (8) reel system spool, (9) steel cable, (10) steel cable tubular guide, (11) lid for finishing and protection of the transmission system (it prevents raining in ), (12) bearing, (13) rail, (14) canvas / fabric, (15) L angle corner plate, (16) optional protection plastic or wood lid, (17) open body view, (18) bearing, (19) transversal open body covering, (20) axle-pin ( slot key ), (21) L angle hinge fastened with hexagonal screw, (22) corner plate view, (23) transversal open body cover bar, (24) rail without slot key system, (25) rail with slot key system, (26) slot key for motor turning off, (27) double wiring as far as the central (by remote control or manual operation both inside the van cabin).

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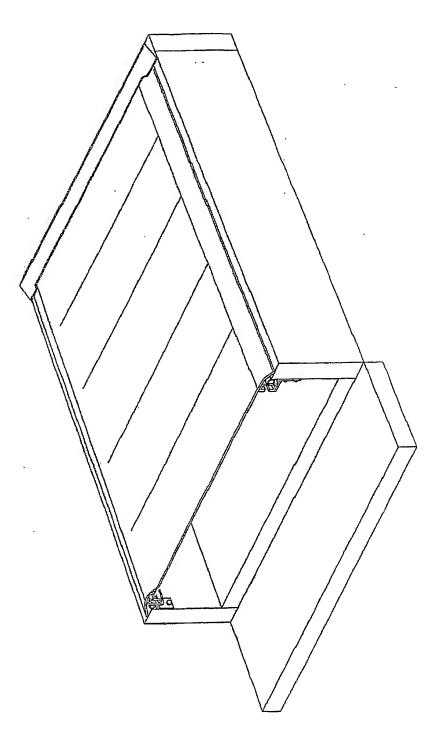
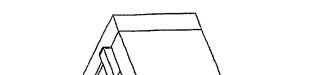


FIG 1

PCT/BR2004/000217



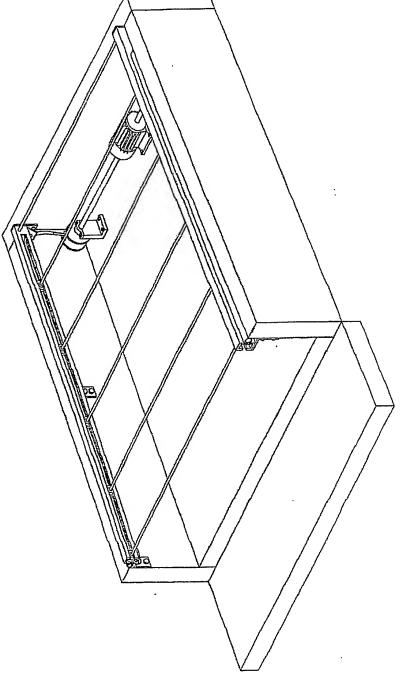
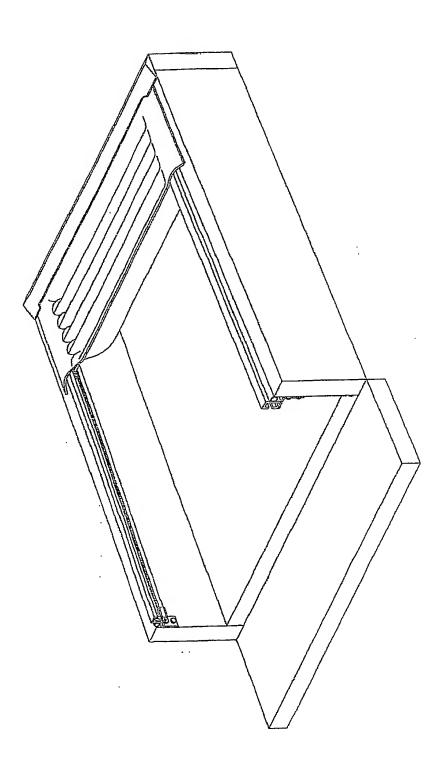
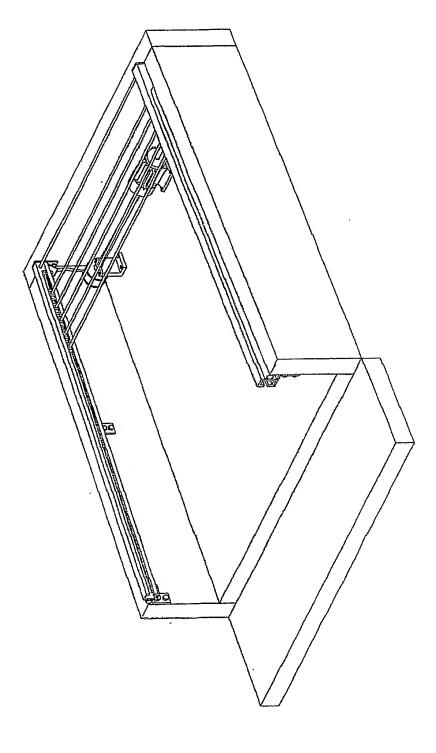


FIG 2







# 9 T L

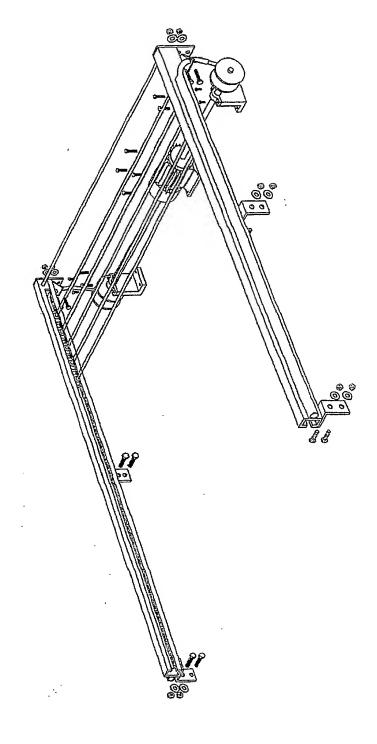


FIG 5

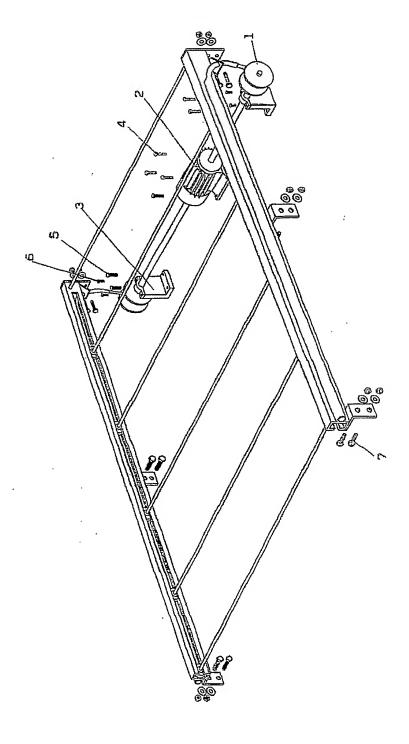
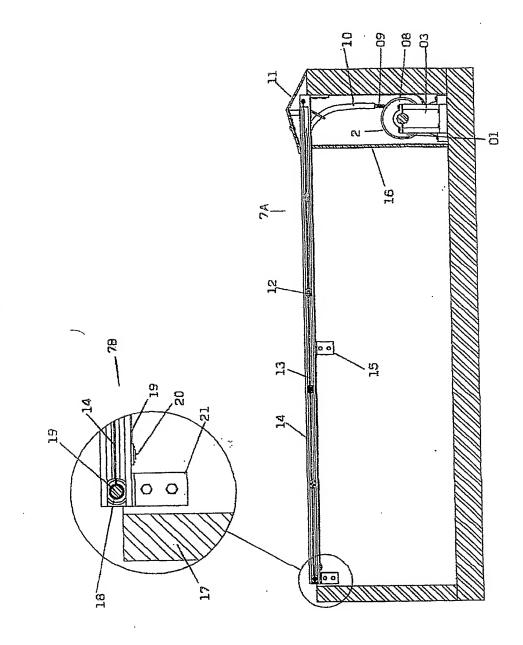


FIG 6



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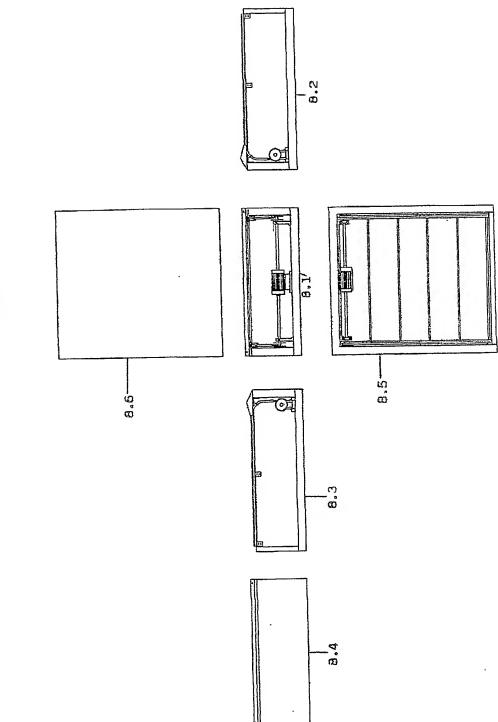


FIG 8

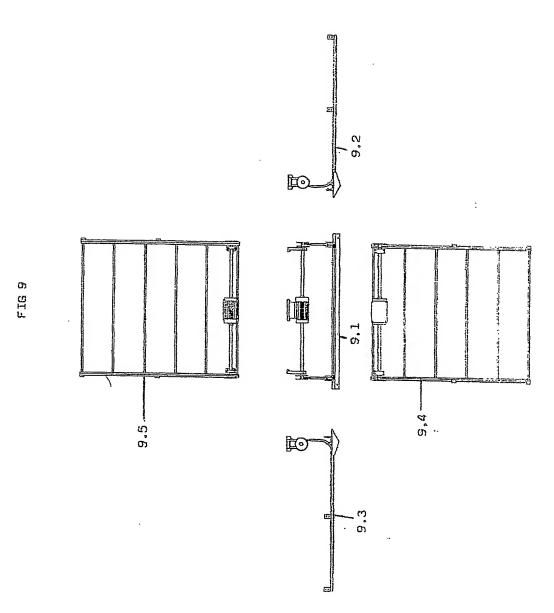
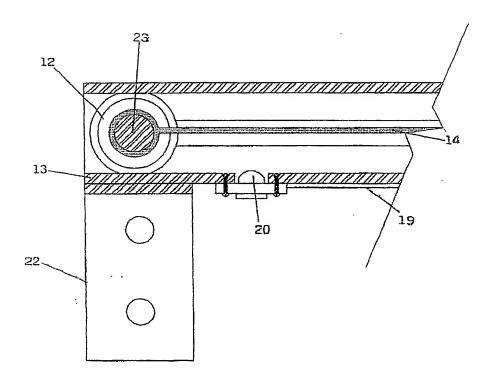


FIG 10



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FIG 11

